

Installation Manual

Introduction

This high-performance RFI shielded infrared unit is ideally suited to monitor exit requests in card access systems, as well as handle other security "vertical-view" protection requirements.

Specialized design features of the 460 include a low noise, high sensitivity, dual element sensor which permits quicker response at close range, a unique full-curtain adjustable pattern lens, Auto Pulse Signal Processing, automatic compensation for temperature variation in the protected area, an adjustable signaling period, and a choice of two different operating voltages (12-24V).

Installation

Caution: When selecting detector location, please ensure that the 460 is not placed directly above or in close proximity to a heat source that could cause rapid fluctuations in detector temperature. If you are using the 460 for card access systems, a hand-sized movement will be accurately detected from a distance of up to 2.1 meters. For body-sized movements, the 460 will detect accurately up to 6.6m.

Opening the Detector Prior to Installation

Place a small screwdriver in the two insertion points found at the base of the detector. Gently pry off the back cover of the detector.

Mounting

Knock out the wire hole entry you wish to use and run the wire through the entry. When installing, you can vary the distance from the detector to the wall using the six spacers supplied with the 460. Make sure that nothing blocks the view of the lens opening (i.e. a door frame or any other object). The 460 can be mounted with a view down, up or to the side. Connect the wires by using either the relay output (0.15A max) or transistor (2A max) output option, depending on your detector model.

Caution: When driving high current loads like door locks, do not exceed the maximum current of 2 Amperes DC. When using the relay output, the maximum current should not exceed 0.15 Amperes. The transistor output is connected to ground in the "CLOSED" position.

Opening the Detector After Installation

Gently pull on the lip found at the base of the detector near the lens opening. To close the detector, replace the detector cover on its base and snap it on.

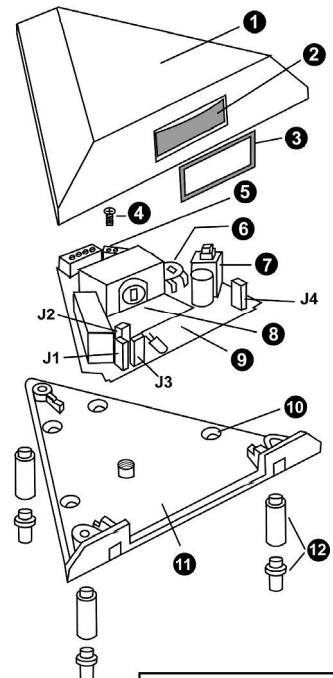
Beam Pattern Adjustments

The 460 has two adjustable patterns; 0 degrees and 10 degrees. It is factory-set in the "0 degree" lens position. To change the beam angle, remove the lens holder, pull out the lens and rotate it 180 degrees.

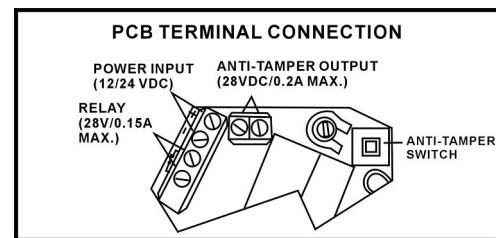
Replace the lens in the detector and gently put back the lens holder, ensuring that the small opening in the lens holder faces the inside left corner of the lens.

Alarm Duration Adjustments

Rotate the trimmer clockwise to increase signal time and counter clockwise to decrease signal time.



J1	LED JUMPER
J2	OUTPUT TYPE JUMPER
J3	AUTO PULSE JUMPER
J4	OPERATING VOLTAGE JUMPER
⑤	ELECTRICAL CONNECTORS
⑥	SIGNAL DURATION TRIMMER
⑦	ANTI-TAMPER SWITCH
⑧	"ATC" LABEL
⑨	PCB
⑩	WIRE HOLE
⑪	BACK
⑫	SPACERS



Jumper Settings

The 460 has four jumpers, three on the bottom left and one on the bottom right.

J1: Enables LED indicator in the "ON" position.

J2: Selects the output type: in the "ON" position, the output type is "normally closed" (open when signal is detected). In the "OFF" position, the output type is "normally opened" (output is closed when signal is detected).

J3: Turns the Auto-pulse on and off. Please note that when the jumper is "ON", Auto-pulse is OFF. In security applications the Auto-pulse setting should always be ON (Jumper "OFF"). In card access applications, the Auto-pulse should be turned OFF (Jumper "ON") to achieve more rapid detection.

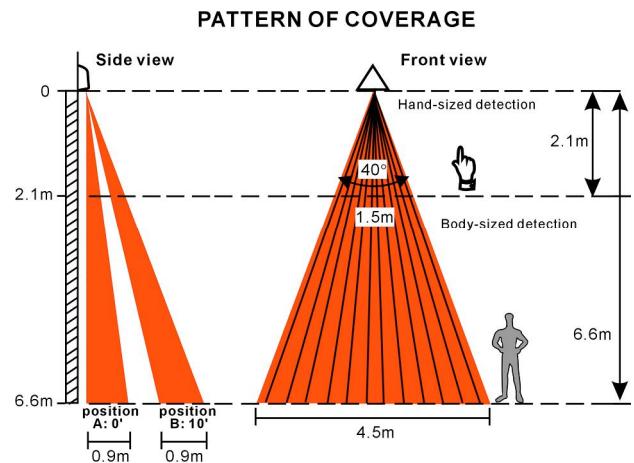
J4: Selects the operating voltage. Set in the "ON" position for 12 VDC and "OFF" for 24VDC operation.

JUMPER SETTING	
ON	OFF

Warranty

The Seller warrants its products to be free from defects in materials and workmanship under normal use for a period of one year. Except as specifically stated herein, all express or implied warranties whatsoever, statutory or otherwise, including without limitation, any implied warranty of merchantability and fitness for a particular purpose, are expressly excluded. Since Seller does not install or connect the products and because the products may be used in conjunction with products not manufactured by the Seller. Seller cannot guarantee the performance of the security system. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any products not meeting the specifications. In no event shall the Seller be liable to the buyer or any other person for any losses or damages whether direct or indirect or consequential or incidental, including without limitation, any damages for lost profits stolen goods, or claims by any other party, caused by defective goods or otherwise arising from the improper, incorrect or otherwise faulty installation or use of the merchandise sold.

Note: It is up to the local authorities that have jurisdiction over the area in which the device is being installed that can authorize if the device can be used in lieu of panic hardware or can be installed in a fail secure condition. In accordance with UL294, this device can be installed for use in Access Control applications. The user is cautioned that any changes or modifications not expressly approved by Posonic Security Systems could void the user's authority to operate/use the equipment.



TECHNICAL SPECIFICATIONS

Sensor	Dual, low noise high response
Processing	Threshold or Auto-pulse, Automatic temperature compensation, metal shielding
Detection Speed	0.2m to 7m/sec. (0.6ft. to 23ft./sec.)
Operating Temperature	-10°C to +50°C (+14°F to +122°F)
Voltage	9 to 16VDC or 20 to 27VDC
Current	18mA maximum
Installation Height	2m to 2.7m (7ft. to 9ft.)
Lens	Cylindrical LODIFF® segment full curtain Fresnel lens
Coverage	2.1m x 1.5m (7' x 5') - card access applications; 6.6m x 4.5m (21' x 15') - security applications
Alarm/Detection Signal	Green LED; 0.5 secs. to 25 secs.
Relay Output	28VDC, 0.15A, N.C. or N.O.
Anti-Tamper switch	28VDC, 0.15A, opens when cover removed